

## CAUSATION IN PRIVATE TORT LAW: A COMMENT ON KELMAN

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Two theories of tort liability influence modern tort law. The corrective justice theory ("CJT") holds that it is actionable to cause harm to another wrongfully; a victim so injured can recover his losses from the injurer. The efficiency theory ("ET") holds that the risk of accidents should be imposed to minimize the sum of accident and accident avoidance costs. This theory implies that a victim can shift his losses to another only if such a shift would increase welfare. Both theories of tort require causal determinations. A court applying the CJT must make two kinds of causal determinations: (1) ascertaining the relation between antecedent actions, inactions, or states of affairs and the particular event at issue; and (2) attributing to one or more of the candidate causal factors the appellation "the cause." As examples of the former, factual inquiry: did the bullet that defendant fired injure the victim? Did the smoke emitted from defendant's plant contribute to the cancer the victim suffered? To understand the latter attribution inquiry, one should realize that events are products of sets of jointly sufficient antecedent conditions. Suppose, as an illustration, that a house burned down because a defective television emitted sparks that ignited a nearby flammable curtain, and the house lacked a smoke detector or sprinkler system. The set of jointly sufficient conditions that produced the event "house burned down" included the television, the curtain, and the homeowner's failure to take precautionary actions. If the owner sues the television manufacturer, the question for a court attempting to apply the CJT is whether the untoward event was caused by the selling of the defective set *or* the presence of the curtain, *etc.*; the court must attribute the event at issue to "a cause." This inquiry is necessary because the CJT holds liable only persons who have wrongfully *caused* harm. The ET collapses the attribution inquiry into the factual inquiry because the pursuit of efficiency requires liability to be assigned so as to minimize accident costs; hence, the ET would impose the risk of loss in the burning house illustration on the manufacturer, homeowner, or both, depending on such factors as each candidate actor's ability to take precautions and his access to infor-

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mation. There is no need, within efficiency theory, to make a singular causal attribution.

The difficulty of making causal attributions, whether for scientific, historical, or legal purposes, has been recognized for centuries and speculation about them has produced a large, complex literature.<sup>1</sup> The difficulty of resolving factual causal problems also is extremely well known—it is, after all, the task of scientists to know what causes what—but this difficulty has achieved considerable salience for legal theorists in recent years because of the rise of toxic torts. Toxic tort cases often involve poorly understood relations between antecedent conditions and events. For example, did chemical X alone cause Y set of cancers? Did X merely increase the probability that Y set would occur? If so, by how much? Questions like these have provoked a large body of literature dealing with burden of proof questions and such institutional issues as whether the judicial system is well suited to resolving “probabilistic causation” cases, how the system could be modified to improve its functioning, or whether administrative solutions to toxic tort problems are preferable.<sup>2</sup>

Mark Kelman’s thesis<sup>3</sup> is that factual and attribution inquiries are too difficult for juries to make. Since both the CJT and ET presuppose the ability of juries to make them, these theories of tort, he argues, are irretrievably flawed. Society’s only sensible alternative to the private law tort system that the CJT and ET purport to guide is the regulatory solution, which his paper concludes by advocating. This comment argues that Kelman fails to sustain his thesis.

## I. CAUSE AND THE CJT

Kelman claims that the CJT faces three problems. His initial con-

1. The seminal work is D. HUME, ENQUIRIES CONCERNING HUMAN UNDERSTANDING AND CONCERNING THE PRINCIPLES OF MORALS 1-165 (P.H. Nidditch, 3d ed. 1975). See also J. ELSTER, EXPLAINING TECHNICAL CHANGE (1983); J. MACKIE, THE CEMENT OF THE UNIVERSE: A STUDY OF CAUSATION (1974); P. SUPPES, A PROBABILISTIC THEORY OF CAUSALITY (1970); Mulaik, *Toward A Synthesis of Deterministic and Probabilistic Formulations of Causal Relations by the Functional Relation Concept*, 53 PHIL. SCI. 313 (1986).

2. All of these issues are extensively discussed in three recent symposia. See *Rethinking Tort and Environmental Liability Laws: Needs and Objectives of the Late 20th Century and Beyond*, 24 HOUS. L. REV. 1-219 (1987); *Critical Issues in Tort Law Reform: A Search for Principles*, 14 J. LEGAL STUD. 459-818 (1985); *Catastrophic Personal Injuries*, 13 J. LEGAL STUD. 415-622 (1984). A recent paper also dealing with the difficulty of making factual findings in toxic tort cases and the appropriate institutional response to this difficulty (which cites extensively to the literature) is Brennan, *Causation Issues in Toxic Tort Litigation*, Mimeo, Harvard Law School (1986).

3. This thesis is set out in Kelman, *The Necessary Myth of Objective Causation Judgments in Liberal Political Theory*, 63 CHI.-KENT L. REV. 579 (1987) (Professor Kelman’s article appears in this symposium issue.).

cern, which is not directly relevant to causation, rests on the fact that any corrective justice theory is parasitic on a just set of entitlements; B cannot claim that A wrongfully caused harm to B's legitimate interests unless these were B's *legitimate* interests. The problem for corrective justice here, Kelman thinks, is that "liberal culture" is unable to engage in the type of justification analysis required to legitimate entitlements. Such analysis entails "straightforward" dialogue about morally preferred desires and values, but "[s]traightforward dialogue about desires and values is precisely what value skeptical liberalism believes impossible."<sup>4</sup> There are two difficulties with Kelman's objection. First, a version of corrective justice can coexist with this kind of value skepticism. Value skeptics commonly believe that a set of entitlements is justified if persons bargaining under appropriate conditions would agree on the elements of the set; unanimous consent legitimates entitlements although each participant in the bargaining process believes himself to hold an incommensurable substantive vision of the good.<sup>5</sup> The CJT implies, on such a view, that no one should wrongfully cause harm to another's "bargained for" entitlement. Second, if Kelman means by a value skeptic a person who believes that it is absurd or unproductive to engage in moral dialogue, value skeptics are an extremely small percentage of the inhabitants of liberal culture. In recent years, there has been an efflorescence of moral theory, much of it devoted to entitlement justification issues. John Rawls is an early example.<sup>6</sup> The presence of this vast literature refutes Kelman's claim that corrective justice theories are impossible because liberals cannot and do not discuss moral theory.

Kelman is on firmer ground in arguing that causal attribution problems create difficulties for the CJT but his discussion focuses on a manageable concern and slights a serious one. Respecting the former, consider again the burning house hypothetical. A CJT theorist must make a causal attribution—did the sparking television or the lack of precautions by the owner cause the fire? People asking such questions have reasons for wanting the answers and these reasons influence the methods by which the answers are found. Put more precisely, causal attributions are relative to the purposes of attributors.

One common purpose is to "explain" why events happen in the

4. *Id.* at 586.

5. *E.g.*, J. BUCHANAN & G. TULLOCK, *THE CALCULUS OF CONSENT* 97-116 (1962); D. GAUTHIER, *MORALS BY AGREEMENT* (1986).

6. J. RAWLS, *A THEORY OF JUSTICE* 310-15 (1971). It is unhelpful to cite to one or two papers or books when the set of works by authors in the liberal tradition that deal with moral theory is so large. A recent sophisticated introduction to this literature with many references is *Symposium on Explanation and Justification in Social Theory*, 97 *ETHICS* 6-277 (1986).

sense of providing an intuitively plausible interpretation of a given event's "history." These sorts of causal explanations are not commonly sought for ordinary events but are sought for relatively unusual ones—fires in homes, world wars. Among people who analyze causal issues in this way, two theories for identifying cause have developed. The first is that one should look for unusual causes—factors not normally present in the environment—as explanations of unusual events.<sup>7</sup> For example, an automobile accident is a relatively unusual event. Its cause from this viewpoint is more likely to be identified as "defective brakes" or "a drunken driver" rather than heavy traffic, even if the particular accident would not have happened without the presence of many other cars; traffic is considerably more common than defective brakes. And in the first illustration, flammable curtains and the absence of smoke alarms seem more common than televisions that issue dramatically large sparks; the defective television thus is likely to be held "the cause."

The second common explanatory criterion is replaceability. For example, person C negligently starts a fire; it is about to go out and person D deliberately puts paraffin on it. The fire flares up and burns houses. In the event, the acts of C and D were necessary to the fire—causes of it—but C's acts were more easily replaceable; had the fire gone out, D likely would have torched his own paraffin. The more difficult to replace cause is "the cause"—that is, a better explanation of the event—because it is less likely that the event would have occurred without this cause than without the other causes.<sup>8</sup>

7. See, e.g., J. FEINBERG, *DOING AND DESERVING: ESSAYS IN THE THEORY OF RESPONSIBILITY* 142-43 (1970); M. WHITE, *FOUNDATIONS OF HISTORICAL KNOWLEDGE* 119 (1965).

8. See J. MACKIE, *supra* note 1, at 127-29. Mackie explains that "in themselves all actual causal factors are equally causes of the result for which each was necessary in the circumstances, but from some human point of view one such factor may be selected as the more important cause, or even as the sole cause." *Id.* at 129 (footnote omitted). The actions of D in the example above were more important than those of C because D presumably would have torched the houses in any event. Kelman apparently believes that this type of case poses an unsolvable causal attribution problem because it is also plausible to describe D's conduct as "doing whatever is needed to burn [the houses] down." Kelman, *supra* note 3 at 605. Under this description, Kelman seems to claim, C did not cause the accident at all. Since the description of D's behavior just given is as plausible as the description in the text above, it is impossible to say whether a person—C here—caused a harm "whenever we believe another actor would have succeeded in causing the harm in his absence." *Id.* at 606. This view is incorrect because events and actions exist (at least to some extent) independently of the descriptions observers attach to them. For example, that Jane either "drove too fast" or "lost control" or "was a victim of modern technology" does not alter the fact that her car crashed into a tree. So here, that D "poured paraffin on the fire" or "would have done whatever is necessary" does not alter the fact that C started the fire and thus performed an act that was necessary for the actual catastrophe that occurred. Therefore, unless Kelman takes the unusual view that whether an action occurred at all—whether C started the relevant fire—is itself a function of how actions are described, he seems bound to accept the conclusion that C's actions are a cause of the fire, which is to say that the concept of causation is untroubled by the description ambiguity Kelman raises. A

A second general purpose that animates attribution inquiries is to prevent or encourage particular forms of behavior.<sup>9</sup> A juror with this purpose in mind should pick from among the set of necessary antecedent conditions of an accident that factor which is likely to cause harm in the general run of cases—the defective brakes in the car illustration above—or the factor most likely to respond appropriately to tort liability—this time, the maker of defective brakes. The factor that it is instrumentally sensible to burden is “the cause.”

Causal attributions never can be free from the possibility of controversy for two reasons. First, they are made relative to attributors' purposes and different attributors may have different purposes for asking causal questions. If so, they may choose different necessary conditions as causes.<sup>10</sup> In the automobile accident example above, a traffic engineer aware that the accident rate rises with increases in traffic volume may classify the accident as just one more product of a normal rush hour, while a jury concerned to deter bad cars may focus on the brakes. Second, people may disagree on the plausibility of causal interpretations, just as they disagree on the plausibility of aesthetic or historical interpretations. That causal attributions are “loose” for these two reasons is no reason for abandoning the attempt to make them. Courts and juries often have common purposes and thus will analyze causal problems in similar ways; most “interesting” causal questions are philosophers' and law professors' inventions while cause seldom is controversial in the cases. Also, causal interpretation criteria commonly have a confined application. Unusual events seldom have several unusual causes.<sup>11</sup> Moreover, it is a mistake to demand more from the available tools than they can provide. That the causes of war or of a particular neurosis can be controversial cannot sensibly imply that the enterprises of history or psychiatry should be abandoned. For those to whom the CJT appeals, disagreements over cause are justifiably depressing or challenging but are not reasons for giving up.

A serious problem for the CJT is that liability impositions sometimes seem appealing although causation is absent or cannot be proved. This difficulty follows from the common notion of cause as a counterfactual. To say that an antecedent factor F is a cause of event E is to say

deeper response to Kelman's views on this issue is in Moore, *Thomson's Preliminaries About Causation and Rights*, 63 CHI.-KENT L. REV. 497 (1987) (Professor Moore's article appears in this issue.).

9. See J. FEINBERG, *supra* note 7, at 144-45; J. MACKIE, *supra* note 1, at 127-29.

10. This point is clearly made in Dray, *Causal Judgment in Attributive and Explanatory Contexts*, 49 LAW & CONTEMP. PROBS. 13, 19 (No. 3, 1986).

11. See M. WHITE, *supra* note 7, at 122-23.

that had factor F not happened, and had the world otherwise run on just as it did, the event E would not have happened; antecedent factors are causes just when and because their presence matters.<sup>12</sup> This intuitively appealing view of cause can become unappealing in common legal contexts. Two illustrations are discussed. First, consider the cause of action in products liability law for failure to warn, and suppose that Company Y manufactures a product that explodes if mixed with water. The product's label warns against mixing the contents with water but says nothing about the possibility of explosions; users could infer that water would just ruin the product, not produce harm. A consumer accidentally permits water to mix with the product and is injured by the resultant explosion. He later truthfully testifies that he did not read the label and never reads labels; had the instructions been crystal clear, he candidly admits, the accident would have happened anyway. The notion of cause as a counterfactual implies that the improper warning was not the cause of the explosion in the illustration above; for had the improper warning been replaced with a better one, and the world otherwise run on just as it did, the accident would have happened anyway. A court applying the CJT thus should find against the consumer. Yet to require plaintiffs to prove that they would have followed clear warnings—to exculpate the manufacturer here because it did not cause the accident—seems unwise; liability should attach because it will encourage people to sue and thus police the adequacy of warnings.<sup>13</sup>

A second example of the difficulty to which making cause a prerequisite of liability can lead is illustrated by the toxic tort case that Kelman

12. This view is clearly put by Lewis: "We think of a cause as something that makes a difference, and the difference it makes must be a difference from what would have happened without it. Had it been absent, its effects—some of them, at least, and usually all—would have been absent as well." Lewis, *Causation*, 70 J. PHIL. 556, 557 (1973). Kelman devotes several pages to an argument with Richard Wright. Kelman, *supra* note 3, at 602-04. Wright seemingly supposes that an antecedent action—the emitting of a small amount of pollution in his illustration—can be a cause of a harm although the harm would have occurred without the action because enough pollution was emitted by another actor. See Wright, *Causation in Tort Law*, 73 CALIF. L. REV. 1735, 1791-94 (1985). Kelman correctly argues that such a view of cause can lead to serious difficulty, but the problem lies more with Wright than with the concept of causation itself: Wright individuates the harm inappropriately. The harm that actually occurred in his example—the cancer—resulted from *all* the pollution that was emitted; hence, the action of every emitter was necessary to this specific harm—i.e., a cause of it. That the same type of harm—a cancer, say—would have occurred had less pollution been emitted is irrelevant to one making a causal attribution in the particular case at hand.

13. Courts generally do not require plaintiffs to prove that they would have followed adequate warnings. *E.g.*, *Reyes v. Wyeth Laboratories*, 498 F.2d 1264 (5th Cir.), *cert. denied*, 419 U.S. 1096 (1974); *Nissen Trampoline Co. v. Terre Haute First Nat'l Bank*, 332 N.E.2d 820 (Ind. Ct. App. 1975), *rev'd on other grounds*, 265 Ind. 457, 358 N.E.2d 974 (1976). A related criticism of the CJT's causation requirement, on the ground that the requirement can impede the pursuit of distributive justice, is found in Alexander, *Causation and Corrective Justice: Does Tort Law Make Sense?*, 6 L. & PHIL. 1 (1987).

discusses. Suppose that persons in the general population get a cancer—cancer L—with probability  $p$ . Persons exposed to emissions from a particular factory get cancer L with probability  $q > p$ . Both  $p$  and  $q$  are less than one half. All persons with cancer L sue the factory, whose defense, in every case, is that plaintiff cannot prove causation. This is a good defense under the CJT because, had the emissions never escaped and had the world otherwise run on as before, a nontrivial percentage of the plaintiffs would have developed cancer anyway; the emissions did not cause cancer L in this set of plaintiffs. Thus, each plaintiff must prove that he was not in this set—that the emissions mattered as to him. Given the state of current science, no plaintiff could carry this burden of proof in many toxic situations. Once more, the CJT implies no liability yet liability is appealing; defendant's actions increased the number of cancers in the world and it should be made to pay, either so that it is faced with the appropriate incentive to invest in safety or because it was responsible for considerable harm.<sup>14</sup> The CJT is a problematic tort theory because it exculpates defendants in cases where most persons' moral intuitions imply that tort liability should be imposed.

Kelman's actual analysis of the probabilistic causation case is difficult to follow.<sup>15</sup> He could be saying either of two things. First, every person with cancer L should be able to recover the appropriate percent of their damages, but the courts' commitment to the causation requirement bars such suits; the courts will not accept probabilistic evidence but in-

14. Liability under the ET would face defendant factory with the appropriate incentive to invest in safety. To see how this could be done, suppose as in the text above that  $p$  is the background probability of cancer L;  $q$  is the probability of getting cancer L faced by those exposed to emissions from defendant's factory;  $C_i$  is the costs of cancer L to a given plaintiff; and  $N$  is the total number of persons exposed. Then  $qN$  people get cancer L. To require defendant to bear the costs it causes, it should be made to pay, in total:

$$\frac{q-p}{q} \sum_{i=1}^{qN} C_i.$$

For example, if  $q = 5\%$ ,  $p = 2\%$ ,  $N = 1,000$  and  $C_i = \$100,000$  (per cancer victim), defendant should pay \$3,000,000. Hence, if everyone who contracts cancer L sues, courts should not inquire into causation in particular cases, but rather should award each plaintiff \$60,000; then defendant would be induced to behave appropriately. This analysis of probabilistic causation is becoming common; it is most thoroughly worked out in Shavell, *Uncertainty Over Causation and the Determination of Civil Liability*, 28 J. L. & ECON. 587 (1985). The courts, however, are reluctant to base liability on such probabilistic calculations. See Brennan, *supra* note 2. This may be because point estimates of disease probabilities ( $q = .05$ ) are difficult to make for toxic harms, given what is known about these harms. An interesting suggestion that full compensation is inappropriate in probabilistic causation cases but that juries should be permitted to discount awards in a less formal way than this note suggests is in Note, *Causation in Toxic Torts: Burdens of Proof, Standards of Persuasion and Statistical Evidence*, 96 YALE L.J. 376 (1986). Another interesting scheme that attempts to adapt the probabilistic causation concept to the case of heterogeneous plaintiffs is Farber, *Toxic Causation*, 71 MINN. L. REV. 1219 (1987).

15. Kelman, *supra* note 3, at 593-600.

stead require proof that defendant's emissions in fact caused a given plaintiff's cancer. That plaintiffs should prevail in this kind of case is correct normatively, if one accepts the ET, and that plaintiffs seldom would prevail under the current cases is true as well, but neither point is novel.<sup>16</sup> Second, persons who are exposed to cancer L but do not have it should be able to recover from defendant the expected value of the increased risk they face of getting cancer L, so these persons can purchase market insurance or self-insure, but the courts' belief that causation cannot occur until injury occurs bars these suits. This characterization of the cases is correct.<sup>17</sup> Suits for such "*ex ante* compensation" are not inconsistent with the CJT, however, if the notion of a wrongful invasion of a person's rights is broadened to include invasions that create risks of harm; and the extension seems natural, at least to some commentators, since to face a person with a risk is to increase the person's current costs.<sup>18</sup> The stronger objection to suits for *ex ante* compensation, rather, come from within the ET itself; awarding *ex ante* compensation creates moral hazard problems and so may increase accident costs.<sup>19</sup> The relevant point here, however, is that Kelman cannot plausibly criticize the CJT because it prohibits *ex ante* compensation; rather, as said above, the CJT is questionable because its insistence on causation as a prerequisite for liability can prohibit any compensation at all.<sup>20</sup>

16. See, e.g., Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 849 (1984); Shavell, *supra* note 14; Brennan, *supra* note 2; Note, *supra* note 14.

17. A seemingly typical view is: "Until . . . the plaintiff develops cancer . . . the causation of cancer has not occurred." *Jackson v. Johns-Manville Sales Corp.*, 727 F.2d 506, 520 (5th Cir. 1984) (refusing to allow plaintiff to recover compensation for being exposed to a risk of cancer that the plaintiff had yet to contract), *rev'd en banc*, 750 F.2d 1314 (5th Cir.), *questions certified*, 757 F.2d 614 (5th Cir.), *certification denied*, 469 So. 2d 99 (Miss. 1985), *on reh'g*, 781 F.2d 394 (5th Cir.) (*en banc*) (affirming district court judgment), *cert. denied*, 106 S. Ct. 3339 (1986).

18. This argument is made in Robinson, *Probabilistic Causation and Compensation for Tortious Risk*, 14 J. LEGAL STUD. 779, 789-91 (1985). Referring to the illustration in note 14, if 1,000 exposed persons sued for *ex ante* compensation, each should recover \$3,000 ( $\$3,000,000 \div 1,000$ ). A view that the CJT prohibits *ex ante* compensation is in Weinrib, *Toward A Moral Theory of Negligence Law*, 2 L. & PHIL. 37, 45-48 (1983).

19. To understand this concern, refer again to the illustration discussed in notes 14 and 18 and suppose that each person who will be exposed to defendant factory's emissions is paid \$3,000 *ex ante*. Since none of the people could later sue if they contracted cancer, having been fully compensated *ex ante*, the defendant has no incentive to invest in discovering new ways to reduce risks of harm. Further, the defendant has an incentive to act in a less safe fashion than he would otherwise have since all potential plaintiffs have purchased insurance coverage (or had the opportunity to do so) and thus these persons lack a strong incentive to monitor the defendant's behavior. Monitoring also is a public good to the full set of potential victims and so may be done insufficiently in any event.

20. The textual analysis also illuminates the issue of preemptive causation. As an example,  $D_2$  plans to shoot P;  $D_1$  plans to and does fatally poison P and  $D_2$ , while P lays dying, shoots and kills him. There are two ways to discuss this case. First, if the relevant event is individuated as "P's death," neither actor caused it: (i)  $D_1$  did not cause the death because, had she not acted, P would have died anyway;  $D_2$  would have—indeed, did—shoot him; (ii)  $D_2$  did not cause the death because



To summarize, causation issues create difficulties for the CJT but not the difficulties Kelman stresses. Rather, the CJT requires proof of causation before liability can be imposed while the instrumental morality that is influential in everyday life sometimes implies liability though causation cannot be established. This plainly is a reproach to the CJT, but not to the private law tort system itself, which can rest on other justifications.

## II. CAUSE AND THE ET

Kelman claims that the ET is unsuitable as a private law tort theory because the relation between antecedent factors and costly events is not perfectly knowable. He asserts that "efficiency may not be attained in the absence of perfectly determinate causation judgments";<sup>21</sup> that maintaining a "belief" in the law's efficiency is difficult—impossible, as it turns out—"in the absence of consensus accounts of causal nexus between conduct and consequence";<sup>22</sup> that "we cannot *know* how much damage is caused [by an act], even if we know what it *means* to cause damage."<sup>23</sup> These "empirical problems" are "insuperable and widespread," infecting "[a]ll tort cases."<sup>24</sup> Kelman could be saying any of three things here, two of them incorrect and the third insufficiently developed. First, unless causation questions can be answered "perfectly"—unless, that is, science can answer *all* questions put to it—consequentialist moral theories cannot be implemented practically. This position is erroneous and Kelman, though he sometimes writes broadly, is unlikely to hold it; his proposed regulatory solution itself requires an administra-

had she not acted, D<sub>1</sub> would have—indeed did—fatally poison P. If the event is individuated as "P's particular form of death," then D<sub>2</sub> caused it; P actually died from the bullet, not the poison. Were P's heirs to sue defendants under the CJT, no one would be liable under the first description and only D<sub>2</sub> would be liable under the second. Neither result is acceptable to most observers because consequentialist reasons exist—to deter harm—that justify sanctioning both defendants. Kelman discusses a variant of the preemptive causation case at length and concludes that the ET alone resolves the issue satisfactorily. Kelman, *supra* note 3, at 608-17. He does not generalize appropriately from this correct conclusion—*viz.*, that the CJT is questionable because of its insistence on cause as a prerequisite to liability, but that an efficiency motivated private law tort system is not similarly disabled.

21. *Id.* at 624.

22. *Id.* at 622.

23. *Id.* at 637 (emphasis in original).

24. *Id.* at 579-80 (emphasis in original). Kelman also claims that a "libertarian or . . . efficiency-theorist" believes that no uncertainty about cause exists; these theorists, he asserts, are victims of "the liberal fantasy . . . that we can assess straightforwardly the expected damage the polluter causes and let him decide whether to damage or not." *Id.* at 633-34. This claim is false. As the extensive literature cited in notes 2 and 16, *supra*, show, liberal theorists struggle frequently and self-consciously with issues of causal uncertainty. Another recent and provocative example from the field of epidemiology is Seiler & Scott, *Mixtures of Toxic Agents and Attributable Risk Calculations*, 7 RISK ANALYSIS 81 (1987).

tor to make empirical causal findings on subjects, such as the harm-causing potential of alleged carcinogens, about which, as Kelman knows, considerable uncertainty exists.<sup>25</sup>

Kelman instead may be claiming that causal determinations are too complex for juries in all cases.<sup>26</sup> His analysis here recalls a problem for the ET, but it is not a problem having to do with cause. The problem is this: the ET works by creating incentives for firms to engage in risk minimizing behavior, the incentives being the imposition of costs on firms as a result of their accident causing activities on the one hand, and the freedom from bearing those costs on the other, when the law is negligence and firms behave appropriately. Thus, the ET supposes that firms can calculate expected accident costs. As these costs are partly a function of jury behavior, that behavior too must be predictable. In recent years, tort law has relaxed restrictions on recoveries for "mental" harms—pain and suffering and emotional distress. Jury verdicts for such harms are relatively difficult to predict, but whatever problems this poses for the ET are not causal. To take a simple example, suppose defendant drove negligently and ran into plaintiff, who suffered physical injuries and great pain. Plaintiff can recover for her pain and suffering, but no money metric exists to transform injuries of this type into liability assessments; rather, the jury decides, in an intuitive way, how much the pain and suffering is "worth." Everyone would agree that defendant here caused plaintiff's pain by negligently crashing into her. The problem in damage prediction that this illustration poses results from the very imperfect knowability of psychological states. And the problem is thought to be serious because it puts a wedge between the tort goal of creating appropriate incentives for safety, which demands the predictable application of rules, and the tort goal of compensating victims fully, which seemingly compromises this demand.<sup>27</sup> The resultant conflict may appear frequently in tort cases, but finding causation is a difficulty in very few of these cases.

Finally, Kelman might be saying that some tort cases, particularly those involving toxic harms, raise causation issues that are too difficult for juries to resolve. This claim is plausible, although not original,<sup>28</sup> nor does Kelman contribute to the difficult question, which cases should be

25. See, e.g., *id.* at 633-34.

26. See *id.* at 635-36.

27. The lively debate among products liability theorists and many legislators respecting whether pain and suffering awards should be permitted, eliminated or capped reflects the "liberal theorists'" awareness of the problem that mental losses create.

28. See, e.g., sources cited *supra* notes 2 & 16.

resolved under tort law and which resolved elsewhere. Also, were this last claim valid, a large class of cases would remain appropriate for private law to govern under the moral theories that now prevail.

### III. KELMAN'S REGULATORY SOLUTION

Kelman proposes a regulatory solution to the problems his paper discusses; tort cases should be handled by a "regulator." The practical details of this proposal are not developed. It is unclear whether Kelman wants each state to have its own regulator or whether the regulator should be a federal official; nor is it clear whether the regulator is to supplant tort law entirely, so that she decides cases involving motor vehicle accidents and invitee liability, or whether the regulator is to handle only important or difficult matters. Because the administrative aspects of Kelman's proposal are unspecified, it seems best to focus on its substance.

Kelman's regulatory solution is problematic because it asks regulators to do too much. His regulator, in deciding whether to permit or prohibit activities, would compare costs and benefits, as juries now are instructed to do; she also would explicitly consider confidence intervals when making probability assessments and take "relative error costs" into account. He means by this a variant of standard risk of error analysis—the weighing more heavily of probabilities of especially awful consequences.<sup>29</sup> The regulator also must consider separate activities that synergistically produce harm, proscribing that activity that is "best eliminated" on (it seems) cost benefit grounds.<sup>30</sup> None of these proposals are controversial, but the making of them entails a difficulty for Kelman: the proposals belie much of the analysis and the overarching ethos of his paper, for if any set of decision makers can make the cost benefit analyses Kelman believes are wise, his objections to efficiency theories of tort are reduced to questions of institutional detail. For example, Kelman could not object to a decentralized tort system that explicitly pursued the efficiency goal if the role juries now play is performed by local administrative agencies, such as a state or city EPA, or by special masters in complex cases. Kelman meets this objection by assigning additional tasks to his regulator, and it is these tasks that create difficulties.

Kelman wants the regulator to assess the benefits of activities not (or not only) by asking what benefits affected persons believe that they derive from these activities; rather, the regulator is to use a "social welfare func-

29. See Kelman, *supra* note 3, at 634-36.

30. *Id.* at 636-37 (emphasis omitted).

tion [which] might . . . (or might not) contain imbedded distributive judgments;" the regulator may "without being inefficient, reasonably ban an activity because her own estimates of the benefits of the activity are lower than the actors'." A regulator who uses this social welfare function "may be quite confident that there would be little loss if an activity is banned" that "turns out to be less harmful" than it initially appeared because the regulator has already decided that the activity's benefits are so low.<sup>31</sup> Kelman is unclear here, but the likely possibilities raise qualms.

The reference to efficiency in the quoted language suggests that Kelman wants the regulator to maximize the utility of all affected persons. If the expressed preferences of these people are not taken as proxies for utility, Kelman must mean that the regulator knows better than these people what is utility maximizing. She would know this only if she could make precise interpersonal utility comparisons, but it seems unlikely that Kelman attributes the ability to do this to any regulator that real life is likely to turn up. Indeed, it is the inability to make interpersonal utility comparisons that produces the difficulty in assessing pain and suffering losses described above. Kelman apparently believes that this difficulty is an embarrassment to the ET and he gives no reason to think that the difficulty would not embarrass his regulator as well.

Alternatively, Kelman may believe that his regulator has (or will develop) independent views of which activities are beneficial. A regulator who disliked sports, for example, could "quite confidently" ban high school soccer because it sometimes injures children; she would know that "there would be little loss" because the sport is really worthless. It seems unlikely that Kelman wants his regulator to act in this fashion, however, (unless he believes the regulator will have privileged access to the truth) because the regulator would then have veto power over everything people do that could cause accidents. But if the regulator is not to weigh the benefits of actions by making interpersonal utility comparisons or by consulting her own vision of the good, how is she to make the sort of cost benefit analyses that Kelman advocates? Kelman's regulatory solution is just too inchoate to evaluate seriously.

### CONCLUSION

Kelman could exhibit the superiority of a regulatory solution to tort cases by establishing that the current largely private law system is so irretrievably flawed that almost any administrative regime would do bet-

31. *Id.* at 634-35.

ter. Or he could describe in detail a proposed regulatory scheme that seems likely to outperform what now exists. The initial two parts of this comment show that Kelman has failed at the first strategy; the last part shows that he has failed at the second.

